*** UNLOCKING MASTER COMBINATION PADLOCKS ***

FINDING THE LAST NUMBER

On older Master Locks, ones where the arrow at the top is raised, simply pull on the shackle and turn the dial until it catches, that's the third number in the combination.

On new locks with the recessed arrow, there are twelve places the dial will catch if you turn it while pulling on the shackle. Seven of these will catch between two numbers - ignore these. Find the five that catch on a number. Four of these will end in the same digit, like 1, 11, 21, and 31. The fifth ends with a different digit, and is the third number in the combination.

FINDING THE FIRST & SECOND NUMBER

Using the last number, locate it in the "last number chart" below to see which table to use to find the possible first and second numbers. Try each of the number combinations until the lock opens. Here's an example...

If the last number is 31 then you must use Table C according to the chart.
That means you must try the following combinations (see Try-Out Tables):

```
 3 -  1 - 31
 3 -  5 - 31
 3 -  9 - 31
 3 - 13 - 31
   etc...
 3 - 37 - 31
 7 -  1 - 31
 7 -  5 - 31
 7 -  9 - 31
 7 - 13 - 31
   etc...
 7 - 37 - 31
11 -  1 - 31
11 -  5 - 31
11 -  9 - 31
   etc...
39 - 37 - 31
```

*** LAST NUMBER CHART ***

TABLE	LAST NUMBER														
A	1	5	9	13	17	21	25	29	33	37	41	45	49	53	57
B	2	6	10	14	18	22	26	30	34	38	42	46	50	54	58
C	3	7	11	15	19	23	27	31	35	39	43	47	51	55	59
D	4	8	12	16	20	24	28	32	36	0					

*** TRY-OUT COMBINATION TABLES ***

TABLE A		TABLE B		TABLE C		TABLE D	
FIRST NUMS	SECOND NUMS	FIRST NUMS	SECOND NUMS	FIRST NUMS	SECOND NUMS	FIRST NUMS	SECOND NUMS
1	3	2	4	3	1	4	2
5	7	6	8	7	5	8	6
9	11	10	12	11	9	12	10
13	15	14	16	15	13	16	14
17	19	18	20	19	17	20	18
21	23	22	24	23	21	24	22
25	27	26	28	27	25	28	26
29	31	30	32	31	29	32	30
33	35	34	36	35	33	36	34
37	39	38	0	39	37	0	38

For those who care... (and yes, the last line in the table above was added).

Derived Formula:
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```
  input "Enter Last Number :", LastNumber
  FirstNumber = LastNumber MOD 4 + abs(LastNumber MOD 4 = 0) * 4
  SecondNumber = (LastNumber + 2) MOD 4 + abs((LastNumber + 2) MOD 4) * 4
  for i = 0 to 36 step 4
    print (FirstNumber+i)*abs(FirstNumber+i<40),(SecondNumber+i)*abs
(SecondNumber+i<40)
  next
```

"Use it, don't abuse it."

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Peace. ~G